

each of the study sites, were checked for the infestation. A total of 43 individuals in the Muniappan lake and 58 individuals in the Light House swamp were found infested. In most cases the branches had been girdled. One to five stems in a plant had been attacked. Stems ranging in diameter from 4 to 11 cm were girdled. In all the individuals, the portion of the branch above the girdled area was found totally dried up.

It is of interest to note that all the three plant species attacked by this beetle in Point Calimere Sanctuary belong to the family Euphorbiaceae. All three species have very soft wood (Gamble 1986), making it convenient for the beetle to girdle the stem.

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P. BALASUBRAMANIAN

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33. OCCURRENCE OF *COPIDOGNATHUS HARTWIGI* BARTSCH (HALACARIDAE: ACARI) FROM THE INDIAN OCEAN (With a text-figure)

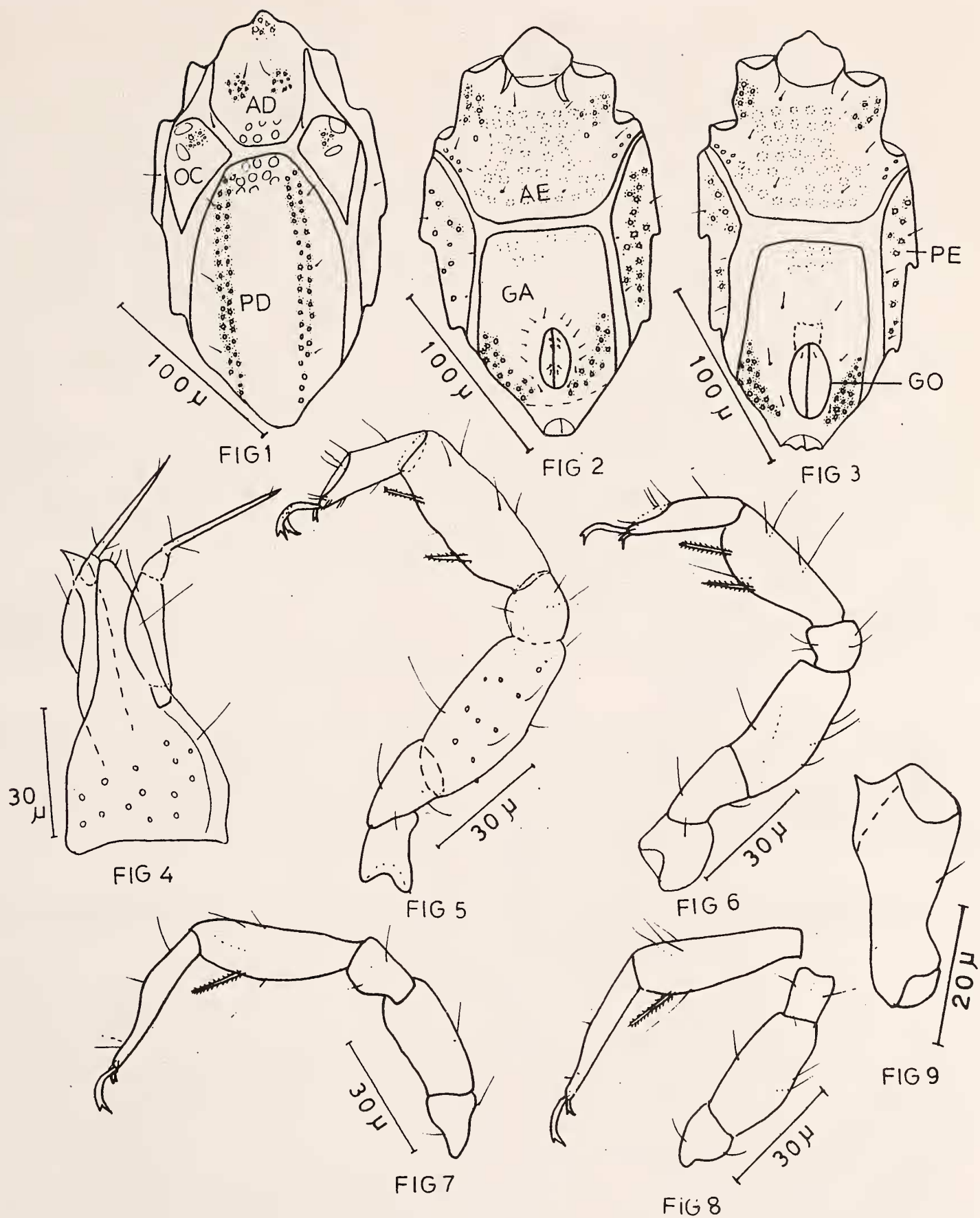
During studies on the biosystematics of Halacaridae of the Indian coast, a large number of halacarids, many of which either are new to science or new to the Indian ocean region or only infrequently recorded, were collected. A comprehensive report of the investigation will be published elsewhere. Presently, the occurrence of *Copidognathus hartwigi* Bartsch 1978 is reported here for the first time, not only from the Indian coast but also from the Indian ocean. The description of males is also provided here since the males have not so far been described.

C. hartwigi has been reported so far from the upper littoral zone of Bermuda among algae (Bartsch 1978) and from the Irish sea near Strangford Narrows among the sublittoral sediments at 30-42 m depth (Bartsch 1985, Green and Macquitty 1987). In the present survey, five specimens (3 males and 2 females) of *C. hartwigi* Bartsch 1978 were obtained from the littoral algal tufts of *Halimeda opuntia* collected from Mus Island (Nicobar islands, Bay of Bengal). A brief description of the male and female of the species is given.

Male: The length of idiosoma of the males ranged

from 216 to 227 μ . All dorsal plates are separate (Fig. 1), sculptured with rosette pores and panelled. Antero-dorsal plate (AD) with one anterior and two circular posterior areolae. Dorsal seta 2 (ds₂) lies in the membranous area between AD and ocular plate (OC).

The length of postero-dorsal plate (PD) is twice that of its width. Two parallel costae are present on PD. Costae are two pores wide. The dorsal setae 3-5 (ds₃, ds₄, ds₅) are located between costae and the lateral margin of PD. Ventral plates are separate (Fig. 2). Epimeral process 1 (Ep1) is coxal in origin. Genito-anal plate (GA) bears paragenital areolae and porose panels. Seven perigenital setae (PGS) on either side of the genital opening (GO) and four pairs of subgenital setae (two located anteriorly and two posteriorly on the GO) are present. Gnathosoma is slender. Rostrum is long and extends up to the base of palpal tibiotarsus (Fig. 4). Gnathosoma is sculptured dorsally with foveae and ventro-laterally with porose panels. Palp 4-segmented. Palpal trochanter and patella are without any setae. Palpal femur with one dorsal seta, palpal tibiotarsus with 3 basal setae,



Figs. 1-9. *Copidognathus hartwigi*

1. Idiosoma dorsal, male, 2. Idiosoma ventral, male, 3. Idiosoma ventral, female, 4. Gnathosoma, 5. Leg I, 6. Leg II, 7. Leg III, 8. Leg IV, 9. Trochanter

besides one minute distal eupathidia.

Chaetotaxy of legs is as shown in Figs. 5-8. Trochanter I bears a postero-dorsal spine (Fig 9). Telofemorae III and IV with 0:1 ventral setae, tibiae III and IV each with two ventral setae (one pectinate and one slender). Tarsi III and IV with 4 and 3 dorsal setae respectively.

Female: The idiosomal length of female ranged between 212 and 237 μ . The female resembles the males in almost all respects except the GA and in having relatively wider membranous zones between the body plates of dorsum and venter. GA bears paragenital areolae and three pairs of perigenital setae around GO. One pair of Subgenital Setae are present on the GO (Fig. 3). Ovipositor is small.

The costae are two pores wide in the present Indian Ocean specimens, while in the Bermudan specimens the costae are only one pore wide (Bartsch 1978). Green and Macquitty (1987) figured costae two pores wide for their British coast specimens but made no mention of it in the text. Considering the available descriptions from Bermuda and British coasts and the present one it appears that the width of

the costae is variable.

C. hartwigi was collected among the thalli of upper littoral algae in both the Bermudan and Indian coasts. But in the British coast, the species was found in sublittoral sediments. When the variations in the width of the costae are viewed against the diversity of the habitats of *C. hartwigi* in different geographic regions, it becomes apparent that the intraspecific morphological diversity reflects not only the impact of latitudinal variations, huge intervening water masses and land barriers but also the influence of local and regional habitat fragmentation, niche formation and segregation. Studies should be made to elucidate the morphological variants occurring within the same or different biogeographical realms.

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34. TERATOLOGICAL NOTES ON THE FRUIT OF *CHIONANTHUS RAMIFLORUS* ROXB. (With a text-figure)

While scrutinising the herbarium specimens of the family Oleaceae from the Andaman and Nicobar islands at Botanical Survey of India, Port Blair herbarium (PBL), I came across an interesting specimen of *Chionanthus* L. collected by N.G. Nair 3534 from Car Nicobar island.

The specimen does not match with any Indian species of the genus from the peculiar size and texture of the fruit. The fruit was 3.5-5.5 cm long with 8 ridges. The specimen matches with *Linociera beccariana* Stapf, known from Sumatra, in having similar leaf shape, size, texture, size of the petiole and eight ridges on fruit, but differs in not having

flattened internodes, short and thin petioles, less thickened peduncles and pedicels.

Later the specimen was sent to Dr. Ruth Kiew for confirmation of its identity. Kiew in her reply stated that "...the fruits on your specimen are exceptionally large (the largest I had previously seen on other specimens was 2 cm long). It belongs to *Chionanthus ramiflorus* Roxb.... the fruit is also typical in having a thin, brittle pericarp and in the seeds being exalbuminous. Its ridges are the result of superficial vascular bundles (in *L. beccariana* the pericarp is thick and even the inner surface shows the ridges.)..."